UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

BEFORE THE ADMINISTRATOR

IN THE MATTER OF)	PETITION FOR OBJECTION
Proposed Clean Air Act Title V Operating Permit Issued to Northeast Maryland Waste Disposal Authority.)))	Permit Number 24-031-1718

Pursuant to section 505(b)(2) of the Clean Air Act, 42 U.S.C. § 7661d(b)(2), and 40 C.F.R. §70.8(d), the Environmental Integrity Project and Chesapeake Climate Action Network (collectively, "Petitioners)" petition the Administrator of the U.S. Environmental Protection Agency to object to the Title V Operating Permit Number 24-031-1718 issued by the Maryland Department of the Environment ("MDE") on January 1, 2019 to the Northeast Maryland Waste Disposal Authority ("NMWDA") for the operation of the Montgomery County Resource Recovery Facility ("MCRRF Incinerator") located in Montgomery County, Maryland ("Permit" or "MCRRF Permit"). As required by these cited provisions, Petitioners are filing this Petition with the EPA Administrator via e-mail and and providing copies via e-mail and certified U.S. mail to MDE, NMWDA, and EPA Region III.

EPA must object to the MCRRF Permit because it is not in compliance with the Clean Air Act. Specifically, the Permit fails to set forth monitoring requirements that assure continuous compliance with an hourly emissions limit for hydrogen chloride (HCl).

BACKGROUND

NMWDA owns the MCRFF Incinerator, a municipal solid waste incinerator that is operated by Covanta Montgomery, Inc. and located on Martinsburg Road in Dickerson, Montgomery County, Maryland. Air & Radiation Admin., MDE, MCRRF Part 70 Operating Permit Fact Sheet, Permit No. 24-031-1718, Jan. 1, 2019 ("Fact Sheet") at 1. The MCRRF Incinerator is permitted to burn up to 1,800 tons a day of solid waste in "three . . . identical massburn, water wall furnaces," each with a nominal capacity of 600 tons per day on an annual average. *Id.* The MCRRF Incinerator is a major emitter of hazardous air pollutants (HAPs), sulfur oxides (SOx), and nitrogen oxides (NOx). *Id.* at 2.

MDE issued a draft renewal Title V permit for the MCRRF Incinerator in July 2018 for public comment. Petitioners submitted timely comments on the initial draft Title V permit on August 17, 2018. *See* App. A (EIP and CCAN's Comments to MDE (August 17, 2018) hereinafter "Petitioners' Comments"). All issues raised in this Petition were set forth in Petitioner's August 17, 2018 comments to MDE.

MDE made one change to the draft permit in response to Petitioners' comments and provided Petitioners with its response to comments on October 24, 2018. *See* App. B (MDE Response to Comments (Oct. 24, 2018)). According to the EPA Title V public petition deadline website, the EPA's review period for the MCRRF Permit renewal commenced on October 22, 2018 and that review period ended on December 5, 2018. U.S. Envtl. Prot. Agency, Title V Air Operating Permits Public Petition Deadlines *at* https://www.epa.gov/caa-permitting/title-v-operating-permit-public-petition-deadlines (last visited January 28, 2019). MDE issued the final Title V Permit for the MCRRF Incinerator on January 1, 2019.

PETITIONERS

The Environmental Integrity Project ("EIP") is a Washington, D.C. based non-profit founded to advocate for the effective enforcement of environmental laws, with a specific focus on the Clean Air Act and large stationary sources of air pollution like the MCRRF Incinerator. As one method of achieving its mission, EIP participates in permitting proceedings for major sources of air pollution in the State of Maryland. EIP's ability to carry out its mission of improving the enforcement of environmental laws will be adversely impacted if EPA fails to object to the issuance of Title V permits that do not comply with the Clean Air Act.

Petitioner Chesapeake Climate Action Network ("CCAN") is a regional grassroots, nonprofit organization with approximately 18,000 members in Maryland. CCAN was founded to
transition the region towards clean-energy solutions to climate change, specifically in Maryland,
Virginia, and Washington, D.C. CCAN's mission is to educate and mobilize citizens in a way
that fosters a rapid societal switch to clean energy sources. This mission includes ensuring that
facilities that contribute to global warming and produce health-harming air pollutants, such as
trash incinerators, do not impact the health of CCAN's members or the environment. CCAN's
mission and its members are adversely impacted if Title V permits do not comply with the Clean
Air Act and thus allow trash incinerators and other facilities to emit more pollutants than they
should be allowed to emit under the Act — or if permits do not assure compliance with the limits
established under the Act.

SPECIFIC OBJECTIONS

"If any [Title V] permit contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this chapter . . . the Administrator *shall* . . . object to its issuance." CAA §505(b)(1), 42 U.S.C. § 7661d(b)(1) (emphasis added). EPA "does not have discretion whether to object to draft permits once noncompliance has been demonstrated." *See N.Y. Pub. Interest Group v. Whitman*, 321 F.3d 316, 334 (2d Cir. 2003) (holding that EPA is required to object to Title V permits once petitioner has demonstrated that permits do not comply with the Clean Air Act).

I. The MCRRF Permit Does Not Require Monitoring Sufficient to Assure Compliance with the Prevention of Significant Deterioration ("PSD") Limit for HCl.

The Permit requires annual stack testing to show compliance with the Prevention of Significant Deterioration ("PSD") emissions limit for HCl. However, annual stack testing alone cannot assure continuous compliance with the PSD HCl limit, which must be met on an hourly basis. In addition, MDE's Response to Comments fails to show that the Permit requires monitoring that assures compliance with the hourly PSD HCl limit. Therefore, EPA must object to the Permit.

A. The Frequency of Monitoring for an Emissions Limit Must Bear Some Relationship to The Averaging Time Used to Determine Compliance.

The Clean Air Act states that Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. 42 U.S.C. § 7661c(c). On August 19, 2008, the D.C. Circuit Court of Appeals vacated an EPA rule that would have prohibited MDE and other state authorities from adding monitoring provisions to Title V permits if needed to "assure compliance." *See Sierra Club v. EPA*, 536 F.3d 673 (D.C.

Cir. 2008). The Court emphasized the *statutory duty* to include adequate monitoring in Title V permits, noting that

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that "[e]ach permit...shall set forth...monitoring...requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirement insufficient 'to assure compliance' with emission limits has no place in a permit unless and until it is supplemented by more rigorous standards.

Id. at 677. In the decision, the Court acknowledged that "[w]here the applicable requirement does not require periodic testing," [40 C.F.R. §] 70.6(a)(3)(i)(B) obliges the permitting authority to add to the permit 'periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." Id. at 675. To illustrate, the Court expressed doubt that an annual test could assure compliance with an emission limit that had to be met on a daily basis. Id. In other words, the frequency of monitoring must bear some relationship to the averaging time used to determine compliance.

B. The Annual Stack Testing Requirements Set Forth in the Permit Cannot Assure Continuous Compliance with the Hourly PSD-Based HCl Emissions Limit for EU-1, EU-2, and EU-3.

The three municipal waste combustor units at the MCRRF Incinerator, identified in the Permit as EU-1, EU-2, and EU-3, are subject to a PSD limit for HCl of 25 ppmv on a 1-hour average corrected to 7% O2 (dry gas)¹ or at least 95% removal efficiency whichever is less

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¹ The units of measurement are "ppmv" in some cases in the Permit, Permit at 68, and "ppm" in some other documents, such as the MDE Response to Comments. MDE Response to Comments at 5. Petitioners believe it is very clear that the units are intended to refer to the same thing regardless of whether ppmv or ppm is used.

restrictive. Permit at 68. This limit must be met at all times. *See* Permit at 33-34.² The initial draft renewal Title V permit that was issued by MDE for the MCRRF Incinerator in July 2018 ("Draft Permit") did not include any averaging period for any part of this limit. However, the 1-hour averaging period for the concentration-based portion of the limit (in ppmv) was incorporated into the Permit by MDE in response to Petitioners' August 17, 2018 comments.³

The Permit requires that compliance with the PSD HCl limit be determined based on annual stack testing. Permit at 40, 68. Annual stack testing cannot assure continuous compliance with a limit that must be met on an hourly basis. Title V permits must include "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 40 C.F.R. § 70.6(a)(3)(i)(B). In interpreting Title V requirements, the D.C. Circuit Court of Appeals has expressed doubt that annual testing can assure compliance with a daily emission limit. *Sierra Club*, 536 F.3d at 675. ("Where *annual* testing cannot assure compliance with a *daily* limit, may the permitting authority supplement the monitoring requirement to 'assure compliance with the permit terms and conditions,' as the Act commands?" (Emphasis in original)). In the present case, the deficiency is even greater because MDE is allowing annual testing to show compliance with an *hourly* limit.

² Plant Specific Condition 4.1.2 A(2) states that "[t]he standards in Table A [which include the PSD HCl limit] shall apply at all times," with certain exceptions, none of which apply to the PSD HCl limit. Permit at 33-34.

³ In those comments, Petitioners noted that the 1-hour averaging period for the HCl limit was set forth in the 1992.

PSD permit for the MCPPE Inciperator, which permit Patitioners appended to their comments. Petitioners'

PSD permit for the MCRRF Incinerator, which permit Petitioners appended to their comments. Petitioners' Comments at 5; Exhibit A to Petitioners' Comments. Petitioners argued that it was legally impermissible to exclude the 1-hour averaging period unless the averaging period had been removed in a 2013 PSD approval referenced in the Draft Fact Sheet, which Petitioners did not possess. Petitioners' Comments at 4-5. MDE noted in its Response to Comments that the 2013 PSD approval included the 1-hour averaging period for the HCl limit when expressed in ppmv @ 7 % O2. MDE Response to Comments at 3. Thus, MDE incorporated the averaging period into the Permit.

C. MDE's Response to Petitioners' Comments Fails to Show That the Permit's Annual Stack Testing Requirement Can Assure Compliance With the Hourly PSD HCl Limit.

Petitioners state in their comments that the annual stack testing required in the Permit is insufficient to assure compliance with the 1-hour PSD HCl limit. Petitioners' Comments at 4-6. Petitioners also note (1) that the existing on-site Continuous Emissions Monitoring System ("CEMS") for HCl, which is now used for informational purposes only, should be used to show compliance with the PSD HCl limit; and (2) that MDE's rationale for using the HCl CEMS for informational purposes only, based on the fact that EPA had not established certification and QC/QA procedures for HCl CEMS at the time that the PSD permit was issued in the early 1990s, appears to no longer be valid. *Id.* at 5. However, regardless of the status of the existing on-site HCl CEMS, Petitioners clearly state that "[i]n any event, annual stack testing is entirely insufficient to demonstrate compliance with the MCRRF's 1-hour PSD-based emissions limit for HCl." *Id.*

In response to Petitioners' comments regarding monitoring for the PSD HCl limit, MDE explains why it has determined that the existing on-site HCl CEMS cannot be used to demonstrate compliance with the PSD HCl emissions limit. MDE Response to Comments at 3-4. Specifically, MDE states that the existing on-site HCl CEMS does not meet federal performance specifications and, therefore, is non-certifiable. *Id.* at 3. However, MDE does not adequately respond to Petitioners' comment that annual stack testing is insufficient to assure compliance with the PSD HCl limit, and MDE certainly does not demonstrate that annual stack testing does assure continuous compliance with the PSD HCl limit at the MCRRF Incinerator. *See id.* at 3-5. Moreover, MDE acknowledges that the HCl CEMS are used at the facility as an indicator for when corrective action must be taken to control HCl emissions, stating that "the

HCl analyzers have demonstrated to be a reasonable approach for ensuring continuous compliance with the HCl permit limit." *Id.* at 4. But MDE never explains why this approach is not incorporated in the Permit as a requirement.

i. MDE Does Not Demonstrate that Annual Stack Testing Can Assure Continuous Compliance with the Hourly PSD HCl Limit.

As stated above, MDE's Response to Comments is substantively unresponsive to Petitioners' argument that stack testing is insufficient to assure compliance with the hourly PSD HCl limit and focuses on Petitioners' argument that data from the existing on-site HCl CEMS should be used to determine compliance. With respect to stack testing, MDE implies that compliance is assured by the status quo, stating that "upon review of historical HCl data, it is clear that the [municipal waste combustors or EU-1, EU-2, and EU-3] operate at HCl levels that are significantly below compliance limits." MDE Response to Comments at 4. In support of this assertion, MDE refers to Table 2 in the Response to Comments, which provides three data points in total (11.8 ppm, 14.9 ppm, and 15.7 ppm), each representing a 5-year average of the annual stack testing results for one of the municipal waste combustors. MDE Response to Comments at 5. A 5-year average emissions value based on three hours of stack testing per year⁴ does not come close to demonstrating or even indicating that these units are achieving compliance with the concentration-based PSD HCl limit, which must be met on a 1-hour basis at all times.

Further, other HCl datasets demonstrate that HCl emissions from the waste combustors vary widely and reach much higher concentrations than those shown in Table 2. Annual stack test data from 2013 through 2017 for each of the three municipal waste combustor units is provided in the Fact Sheet. Fact Sheet at 53. This dataset ranges from 8.63 ppm to 20.9 ppm,

⁴ The stack test methodology incorporated by reference on page 68 of the Permit contemplates stack test compliance based on the average of three 1-hour test runs. 40 C.F.R. § 60.58b(f)(1),(5).

again based on the average of three 1-hour stack test runs,⁵ showing that, even during stack testing, emissions concentrations can fluctuate substantially. Fact Sheet at 53. This dataset also has a high reading of 20.9 ppm, which is only 16% below the 25 ppm limit as opposed to the 5-year averages shown in the Response to Comments, which MDE notes are between 37% and 53% below the limit. Fact Sheet at 53

In addition, MDE's Response to Petitioners' comments states that the HCl CEMS data

can be used as an effective proxy for actual HCl emissions.⁶ If this is true, then the HCl CEMS data, which is available online, further shows the high variability of the HCl emissions from the three municipal waste combustor units. Montgomery Co. Maryland Dept. of Envt'l Prot., Emissions Data Detail – Resource Recovery Facility at https://www.montgomerycountymd.gov/sws/facilities/rrf/cem-detail.html (hereinafter "Montgomery County CEMS Data Site") (last visited January 29, 2019). Even though the HCl CEMS data is reported on a 3-hour average, meaning that any 1-hour spikes are masked, the data still shows that HCl emissions concentrations can swing sharply by a factor of three or more within a given day. For example, on January 22, 2019, the 3-hour HCl emissions averages reported from Combustion Unit 1 range from 3 ppm to 21 ppm. *Id.* On January 25, 2019, the 3hour HCl emissions averages reported from Combustion Unit 1 range between 5 ppm and 24 ppm, the high value being only 1 ppm below the 1-hour standard. *Id.* As noted above, MDE has cast some doubt on the reliability of the HCl CEMS by stating that it is non-certifiable. However, regardless of the accuracy of individual data points, the CEMS data shows that the HCl emissions from the municipal waste boilers are highly variable.

⁵4 0 C.F.R. § 60.58b(f)(1),(5).

⁶ Specifically, MDE states that the existing on-site HCl CEMs is "an effective surrogate monitoring device for operational controls . . . [and] [t]he outlet CEMS [data] follow closely with the stack tests." ME Response to Comments at 4.

ii. MDE Does Not Explain Why the Permit Fails to Require Use of the Existing HCl CEMS as an Indicator for Actual HCl Emissions.

As stated above, MDE explains that the existing on-site HCl CEMS "does not satisfy federal performance specifications for the equipment and is therefore non-certifiable." MDE Response to Comments at 3.7 However, MDE also states that the existing on-site CEMS is accurate enough to act as an indicator or proxy for whether operational controls are effective enough to keep emissions below the limit. Specifically, MDE states that the existing on-site HCl CEMs is "an effective surrogate monitoring device for operational controls . . . [and] [t]he outlet CEMS [data] follow closely with the stack tests." MDE Response to Comments at 4. MDE also states:

[T]he Permittee uses the HCl monitors to support facility operations. The HCl analyzers have demonstrated to be a reasonable approach for ensuring continuous compliance with the HCl permit limit. The monitors provide real-time data that allows the operators to quickly respond to elevated HCl readings. Available response actions include increasing reagent flow rates (i.e. increased lime usage results in lower acid gas emissions, including both SO2 and HCl), the lighting of auxiliary burners, and adjusting air flows and MSW feed rates.

However, none of these measures are required in the Permit. As MDE acknowledges in the Response to Comments, "compliance with the HCl emissions limit is accomplished through emission stack testing" MDE Response to Comments at 3.

⁷ Petitioners argued, in their comments to MDE, that the rationale for using the HCl CEMs for informational purposes only, as described in the Fact Sheet, appeared to longer hold water. Petitioners' Comments at 5. Specifically, Petitioners noted that the stated rationale for this approach was that the EPA had not, at the time that the initial PSD approval was issued in 1992, approved certification and QA/QC procedures for HCl CEMS. *Id.* Petitioners further noted that it appears that the EPA has now approved such procedures and that HCl CEMS is required for compliance demonstration purposes in the Title V permit for a medical waste incinerator in Maryland. *Id.*

In its Response to Comments, MDE acknowledges that EPA approved performance specifications and QA procedures in 2015 for HCl CEMS which "appear[] potentially applicable to Municipal Waste Combustors" like the MCRRF Incinerator. MDE Response to Comments at 3. However, MDE notes Maryland has not included the relevant procedures in its State Implementation Plan and that the applicable New Source Performance Standards for Municipal Waste Combustors provide for the use of HCl CEMS on an optional basis. *Id.* at 4. MDE also notes that the inlet HCl analyzers are "obsolete, making it difficult to find replacement parts," and the outlet analyzers are unable to meet performance specifications for certified HCl analyzers. *Id.*

The use of HCl CEMS data as an indicator may not be considered in evaluating whether the Permit includes monitoring sufficient to assure compliance with the PSD HCl limit unless the Permit is revised to require the referenced monitoring approach. See Sierra Club, 536 F.3d at 675 ("[w]here the applicable requirement does not require periodic testing,' [40 C.F.R. §] 70.6(a)(3)(i)(B) obliges the permitting authority to add to the permit 'periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit."") In other words, NMWDA must be required under the conditions of the Permit to use the HCl CEMS as an indicator or surrogate for continuous compliance and to establish more specific parameters for when corrective action must be taken based on measured HCl levels.⁸ Under such an approach, MDE would have to establish a threshold for HCl CEMS data on a 1-hour basis. Any exceedance of this threshold would constitute a deviation requiring corrective action, and deviations and resulting corrective actions would have to be reported. Absent incorporation of such a method into the Permit, or an alternative method for assuring compliance on a continuous basis such as a new HCl CEMS that does meet federal specifications, EPA must object to the Permit.

As it stands, the Permit clearly states: "the HCl CEMS data will be used by [MDE] for informational purposes only until certification procedures are approved by [MDE]." Permit at 46. Further, the Permit lacks any compliance monitoring requirements for the PSD HCl limit aside from annual stack testing requirements. Permit at 40, 68. Therefore, the Permit fails to

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⁸ In addition, General Condition 25 of the Permit, titled Credible Evidence, is also not a substitute for monitoring requirements that assure compliance with the PSD HCl limit for two reasons. First, the Clean Air establishes a separate requirement to set forth such monitoring requirements expressly in the permit. 42 U.S.C. § 7661c(c). Second, MDE has cast doubt in its Response to Comments on the reliability of data from the HCl CEMS currently on site by explaining that the inlet CEMS is obsolete and the outlet CEMS does not comply with federal performance specifications and is not certifiable. MDE Response to Comments at 4.

⁹ MDE does not explain in its Response to Comments why a new HCl CEMS that does meet federal specifications cannot be installed on the MCRRF Incinerator and used to determine compliance.

include monitoring requirements that assure continuous compliance with the 1-hour PSD HCl limit, and EPA must object to the Permit on this basis.

CONCLUSION

For the reasons discussed above, EPA must object to the Permit. As clearly raised in Petitioners' comments, the annual stack testing requirements set forth in the Permit fail to assure continuance compliance with the hourly PSD HCl limit. In addition, there are no other monitoring requirements in the Permit for assuring compliance with this limit. Thus, the Permit fails to meet the requirements of the Clean Air Act.

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Respectfully submitted,

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